

CLAIMS

1. A combination tool comprising:
 - a housing having a first end and a second end;
 - a laser device rotatably mounted to said housing, wherein said laser device is rotatable to a first position for projecting a laser line and a second position for projecting a laser beam on a surface; and
 - a sonic device connected to said housing and being adapted to project signals for measuring distances between said tool and a spaced object.
2. The tool as claimed in claim 1, further comprising a microprocessor in communication with said laser device and said sonic device, wherein said microprocessor determines a first distance between said laser line and said surface when said laser device is in the first position and a second distance between a predetermined point on said housing and said surface when said laser device is in the second position.
3. The tool as claimed in claim 2, wherein the predetermined point is the first end of said housing.
4. The tool as claimed in claim 2, further comprising an orientation element in communication with said microprocessor for determining whether the first end of said housing is above the second end of said housing in an upright orientation or the first end of said housing is below the second end of said housing in an inverted orientation.

5. The tool as claimed in claim 4, wherein said orientation element comprises a pair of mercury switches.
6. The tool as claimed in claim 4, further comprising a visual display in communication with said microprocessor, wherein said visual display presents data in a first direction when said housing is in the upright orientation and in a second direction when said housing is in the inverted orientation.
7. The tool as claimed in anyone of claims 1 to 6, further comprising a bracket attached to said housing for supporting said tool over a surface, said bracket having a first mode in which said housing is free to move over the surface and a second mode in which said housing is secured in place over the surface.
8. The tool as claimed in claim 7, wherein said bracket has at least one anchoring element movable between a retracted position for enabling said housing to freely move over the surface and an extended position for securing said bracket to the surface.
9. The tool as claimed in claim 8, wherein said at least one anchoring element includes a pin having a pointed end adapted to engage the surface when said at least one anchoring element is in the extended position.

10. The tool as claimed in anyone of claims 1 to 9, wherein said laser beam projected from said laser device when said laser device is at the second position and said signal projected from said sonic device extend in directions that are substantially co-axial.
11. The tool as claimed in anyone of claims 1 to 10, wherein said laser device includes a laser and at lease one optical element for diffracting light from said laser for projecting said laser line.
12. The tool as claimed in claim 11, wherein said laser is optically coupled with the said optical element when said laser device is rotated to the first position.
13. The tool as claimed in claim 12, wherein said optical element is selected from the group consisting of a lens, a diffraction grating and a holographic element.
14. The tool as claimed in anyone of claims 1 to 13, further comprising a sensor coupled with said housing for detecting objects hidden behind a surface.
15. The tool as claimed in claim 14, wherein said sensor is selected from the group consisting of an electrical current sensing circuitry for detecting electrical wires, a metal sensing circuitry for sensing metal objects and a wood sensing circuit for sensing wood objects.

16. The tool as claimed in claim 15, further comprising:
 - one or more control buttons accessible at an outer surface of said housing for controlling operation of said tool;
 - a visual display provided on said housing for displaying measuring, aligning or sensing data.
17. The tool as claimed in anyone of claims 1 to 16, further comprising a first leveling device for leveling said tool in a horizontal plane and a second leveling device for leveling said tool in a vertical plane.
18. The tool as claimed in claim 17, wherein said laser device includes a rotatable cover having a transparent portion and wherein said first and second leveling devices are visible through the transparent portion.
19. The tool as claimed in anyone of claims 1 to 18, wherein said sonic device is provided at the second end of said housing.
20. The tool as claimed in anyone of claims 1 to 19, wherein said housing has a longitudinal axis and said laser device is rotatable for projecting a plurality of laser lines at various angles relative to the longitudinal axis.
21. The tool as claimed in claim 19, wherein said laser device is oriented toward the second end of said housing when in the second rotated position for aiming said sonic device.

22. The tool as claimed in anyone of claims 1 to 21, further comprising at least one leveling device coupled with said housing for leveling said housing in horizontal and vertical planes.
23. The tool as claimed in anyone of claims 7 to 9, wherein said housing is releasably attachable to said bracket.
24. The tool as claimed in claim 23, wherein said bracket has one or more slots and said housing has one or more projections that are adapted to be snap-fit into the one or more slots.
25. The tool as claimed in anyone of claims 1 to 24, wherein said laser device includes a laser adapted to project light and at least one optical element for diffracting light from said laser for projecting said laser line.
26. The tool as claimed in claim 25, wherein said laser and said optical element are optically coupled in the first rotated position and optically uncoupled in the second rotated position.
27. The tool as claimed in anyone of claims 1 to 26, further comprising:
 - a visual display for presenting information related to operation of said tool;
 - one or more keys for operating said tool; and
 - a microprocessor coupled with said sonic device, said visual display and said keys for controlling said tool.

28. The tool as claimed in anyone of claims 8 to 27, wherein said bracket has a safety cover slidable between a closed position when said at least one anchoring element is retracted and an open position when said at least one anchoring element is extended.